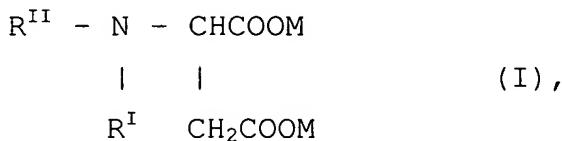


## AMENDMENTS TO THE CLAIMS

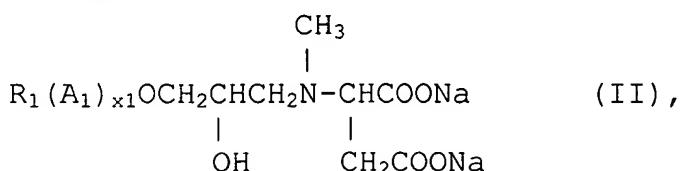
1.(currently amended) A froth flotation process for the enrichment of a calcium phosphate-containing mineral from an ore also containing calcium carbonate, wherein characterized in that the process is performed in the presence of, as a collector, wherein said collector is of a derivative of aspartic acid of the formula



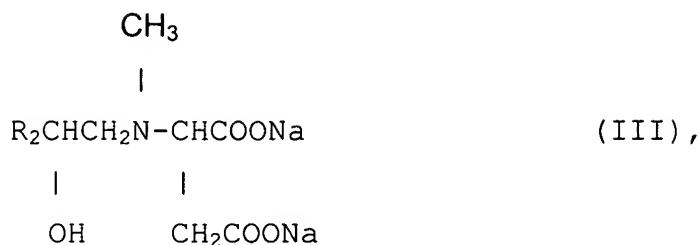
where  $\text{R}^{\text{I}}$  is a hydrophobic group containing a hydrocarbon group of 6-24 carbon atoms;  $\text{R}^{\text{II}}$  is an alkyl group with 1-7 carbon atoms or a group of the formula  $(\text{B})_y\text{H}$ , in which B is an alkyleneoxy group with 2-4 carbon atoms and y is a number from 1 to 10; and M is a group selected from the group consisting of a cation or hydrogen.

2.(currently amended) TheA froth flotation process in accordance with of -claim 1 wherein, characterized in that  $\text{R}^{\text{I}}$  is a glycidyl ether group of the formula  $\text{CH}_2\text{CH}(\text{OH})\text{CH}_2\text{O}(\text{A}_1)_{x1}\text{R}_1$ , in which  $\text{R}_1$  is a hydrocarbon group with 8-24 carbon atoms,  $\text{A}_1$  is an alkyleneoxy group with 2-4 carbon atoms and  $x1$  is a number from 0 to 10; a hydroxyl group of the formula  $\text{CH}_2\text{CH}(\text{OH})\text{R}_2$ , in which  $\text{R}_2$  is a hydrocarbon group with 6-22 carbon atoms; a propylene ether group of the formula  $\text{C}_3\text{H}_6\text{O}(\text{A}_3)_{x3}\text{R}_3$ , in which  $\text{R}_3$  is a hydrocarbon group with 8-24 carbon atoms,  $\text{A}_3$  is an alkyleneoxy group with 2-4 carbon atoms and  $x3$  is a number from 0-10; or a group of the formula  $\text{R}_4$ , where  $\text{R}_4$  is a hydrocarbon group containing 8-24 carbon atoms.

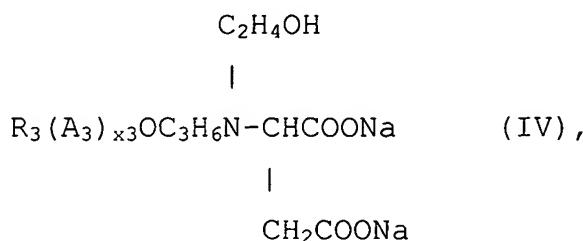
3. (currently amended) TheA froth flotation process according to of -claim 2, wherein characterized in that the derivative is selected from the group consisting of



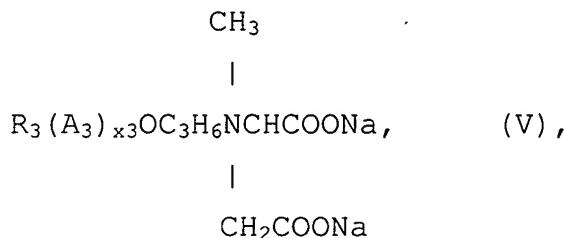
where  $\text{R}_1$ ,  $\text{A}_1$ ,  $x1$  have the same meanings as in claim 2,



where  $\text{R}_2$  has the same meaning as in claim 2,



where  $\text{R}_3$ ,  $\text{A}_3$  and  $x_3$  have the same meanings as in claim 2, and



where  $\text{R}_3$ ,  $\text{A}_3$  and  $x_3$  have the same meanings as in claim 2, and mixtures of two or more of the derivatives of formula II, III, IV or V.

4.(currently amended) The A froth flotation process according to claim 2 or 3, characterized in that wherein -A<sub>1</sub> and A<sub>3</sub> are both ethyleneoxy and x<sub>1</sub> and x<sub>3</sub> are each independently selected from a number of from 1-4.

5. (currently amended) The A froth flotation process according to claim 1 or 2, wherein characterized in that R<sup>II</sup> is methyl, hydroxyethyl or hydroxypropyl.

6. (currently amended) The A froth flotation process according to any one of claims 1-5, characterized in that of claim 1 wherein the derivative is present in an amount of 10-1500 grams per ton of the ore.

7. (currently amended) ~~The A froth flotation process according to any one of claims 1-6, characterized in that~~ of claim 1 wherein the process is performed in the presence of a polar co-collector of the formula

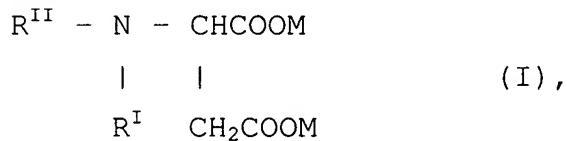


in which  $R^{III}$  is a hydrocarbon group with 8-22 carbon atoms, A is an oxyalkylene group having 2-4 carbon atoms and p is a number from 1-6, or of the formula



in which  $R^{IV}$  is an aliphatic group having 7-21 carbon atoms, A is an alkyleneoxy group having 2-4 carbon atoms, q is a number from 0-6, and Y is an alkyl group having 1-4 carbon atoms or hydrogen, provided that Y cannot be hydrogen when q is zero.

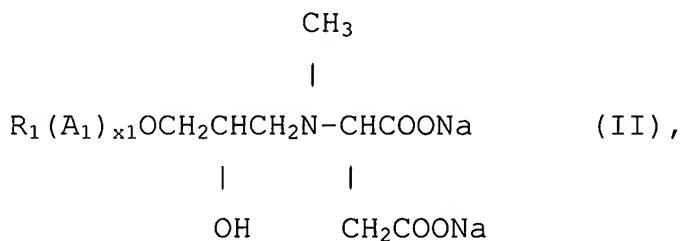
8. (currently amended) A derivative of aspartic acid, ~~characterized in that it has~~ of the formula



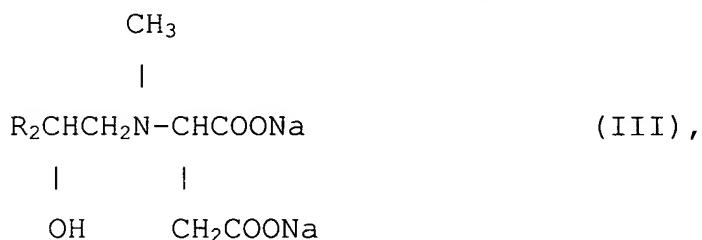
where  $R^I$  is a glycidylether group of the formula  $CH_2CH(OH)CH_2O(A_1)_{x_1}R_1$ , in which  $R_1$  is a hydrocarbon group with 8-24 carbon atoms,  $A_1$  is an alkyleneoxy group with 2-4 carbon atoms and  $x_1$  is a number from 0 to 10; a hydroxyl group of the formula  $CH_2CH(OH)R_2$ , in which  $R_2$  is a hydrocarbon group with 6-22 carbon atoms; a propylene ether group of the formula  $C_3H_6O(A_3)_{x_3}R_3$ , in which  $R_3$  is a hydrocarbon group with 8-24 carbon atoms,  $A_3$  is an alkyleneoxy group with 2-4 carbon atoms and  $x_3$  is a number from 0-10; or a group of the formula  $R_4$ , where  $R_4$  is a hydrocarbon group containing 8-24 carbon atoms;  $R^{II}$  is an alkyl group with 1-7 carbons atoms or a group of the formula  $(B)_yH$ , in which B is an alkyleneoxy group with 2-4 carbon atoms and y is a number from 1 to 10; with the proviso that when  $R^{II}$  is an alkyl group with 1-7 carbon atoms then  $R^I$  is not a group  $RCO$ , where R is a C7-C21 alkyl or alkenyl, a group R, where R is a C8-C22 alkyl or alkylene group, or a group

$(\text{CH}_2)_3\text{OR}$ , where R is a C8-C22 alkyl or alkylene group; and M is a group selected from the group consisting of a cation or hydrogen.

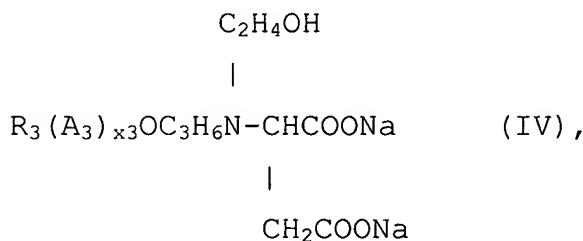
9. (currently amended) ~~The~~A derivative according to ~~of~~ -claim 8, characterized in that wherein -it is selected from the group consisting of



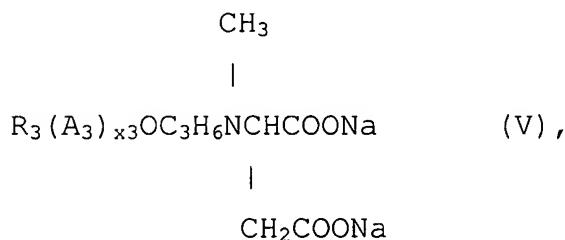
where  $\text{R}_1$ ,  $\text{A}_1$   $x1$  have the same meanings as in claim 2,



where  $\text{R}_2$  has the same meaning as in claim 9,



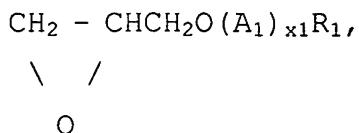
where  $\text{R}_3$ ,  $\text{A}_3$  and  $x3$  have the same meanings as in claim 9, and



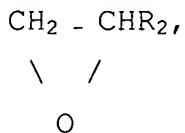
where  $\text{R}_3$ ,  $\text{A}_3$  and  $x3$  have the same meanings as in claim 9, and mixtures of two or more of the derivatives of formula II, III, IV or V.

10. (currently amended) A method of producing a derivative according to claim 8, characterized in that which comprises reacting maleic acid or a salt thereof is reacted under alkaline conditions with

a) a primary amine of the formula  $R''NH_2$ , where  $R''$  has the meaning mentioned above, followed by reacting the intermediate obtained with a glycidylether of the formula



where  $R_1$ ,  $x_1$  and  $A_1$  have the meanings mentioned above, an epoxide of the formula

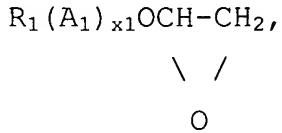


where  $R_2$  has the meaning mentioned above, or a halide compound of the formula  $\text{HalR}_4$ , where  $\text{Hal}$  is a halide and  $R_4$  has the meaning above; or

b) with a primary amine of the formula  $R'NH_2$ , where  $R'$  has the meaning mentioned above, followed by reacting the intermediate obtained with a halide compound of the formula  $\text{HalR}''$ , where  $\text{Hal}$  is a halide and  $R''$  has the meaning mentioned above.

11. (currently amended) The A method according to claim 10, characterized in wherein that

i) the disodium salt of maleic acid is reacted with N-methylamine and the obtained (N-methyl)aspartate disodium salt is further reacted with a compound of the formula



where  $R_1$ ,  $A_1$  and  $x_1$  have the same meanings as in claim 11 to an aspartate of the formula II, or with a compound of the formula